EXHIBIT "B" Part 6 of 7

| l | | |
|----|---------------------------------------|--|
| 1 | of the records for a given year for | |
| 2 | SPS were complete? | |
| 3 | A. Let's see. I think it's | |
| 4 | fair to say that none of the records | |
| 5 | for SPS were considered complete for | |
| 6 | any given year. | |
| 7 | We felt that they were | |
| 8 | spotty, and I believe in the write- | |
| 9 | up, and let me take a look at what we | |
| 10 | concluded. "Recognizing that Table | |
| 11 | 4a's information only" this is, | |
| 12 | I'm sorry, on Page 3-14, second | |
| 13 | paragraph from the bottom "that | |
| 14 | Table 4a's information only | |
| 15 | represents minimum waste quantities | |
| 16 | generated and disposed. Table 4b | |
| 17 | utilizes the quantities summarized in | |
| 18 | 4a to extrapolate the potential | |
| 19 | generated during the approximate | |
| 20 | eight-year period." | |
| 21 | So we recognized that we | |
| 22 | felt that these were minimum waste | |
| 23 | quantities generated and disposed, | |
| 24 | that there were holes in this data | |
| | | |

| 1 | set as well, as there were with | |
|--|---|--|
| 2 | almost all of them. | |
| 3 | Q. And how like, for | |
| 4 | instance, with respect to chromic | |
| 5 | acid, how did you know that those | |
| 6 | records were incomplete? | |
| 7 | A. In the case of chromic | |
| 8 | acid, we had two pickups in June, one | |
| 9 | in August of 1970, we had three | |
| 10 | pickups of chromic acid, identified | |
| 11 | different ways, in 1971, all around | |
| 12 | the end of September, beginning of | |
| 13 | October. | |
| 14 | Is it possible for just | |
| T.4 | IS IC POSSIBLE FOR JUSC | |
| 15 | those two years that they were | |
| 15 | | |
| 15 16 | those two years that they were | |
| | those two years that they were batching this material and that was | |
| 15 16 17 18 | those two years that they were batching this material and that was all they generated? I suppose that's | |
| 15 16 17 18 19 | those two years that they were batching this material and that was all they generated? I suppose that's possible. But then there are storage | |
| 15 16 17 18 19 20 21 | those two years that they were batching this material and that was all they generated? I suppose that's possible. But then there are storage implications associated with, depending on how this waste was characterized, whether they would be | |
| 15 16 17 18 19 20 21 22 | those two years that they were batching this material and that was all they generated? I suppose that's possible. But then there are storage implications associated with, depending on how this waste was characterized, whether they would be allowed to store it for a year. | |
| 15 16 17 18 19 20 21 | those two years that they were batching this material and that was all they generated? I suppose that's possible. But then there are storage implications associated with, depending on how this waste was characterized, whether they would be | |

| 1 | was probably just partial records |
|----|---------------------------------------|
| 2 | rather than an accumulation over a |
| 3 | year. |
| 4 | Q. But you didn't consider the |
| 5 | frequency as to how the waste was |
| 6 | generated or whether they may have |
| 7 | stored it for some period of time on |
| 8 | site? |
| 9 | A. We considered it, and, |
| 10 | again, given the classification that |
| 11 | some of this waste would clearly have |
| 12 | as RCRA hazardous, if they were |
| 13 | accumulating it over 90 days then |
| 14 | they were in regulatory difficulty. |
| 15 | We didn't want to assume |
| 16 | they were in regulatory difficulty, |
| 17 | so we assumed, in turn, that they |
| 18 | probably were compliant with the law, |
| 19 | they just weren't reporting |
| 20 | everything. |
| 21 | Q. And does that hold true for |
| 22 | 1971? In other words, is the basis |
| 23 | for your opinion that the 1971 |
| 24 | chromic acid records are not |

| complete, is that based on the RCRA |
|---------------------------------------|
| statute and RCRA regulations? |
| A. That's only part of it. I |
| mean, it's a judgment call based on |
| the fact that we only received three |
| entries for 1971 in the chromic acid |
| example, and they are all clustered |
| around a three-week period, and then |
| we move on to 1972. |
| Q. Now, are some of the wastes |
| that are listed in mixed waste or |
| other, isn't some of that also |
| chromic acid? |
| A. It is possible that it |
| could be chromic acid. The problem |
| is that the name that was given for |
| this waste is not specific enough. |
| We simply can't say. |
| For example, is it possible |
| that acid waste is chromic acid? It |
| is possible. But since it doesn't |
| have chromic or chromate or something |
| l |
| in it that would identify it as |
| |

| 1 | Q. Well, some of them do in | |
|----|---------------------------------------|--|
| 2 | the mixed waste category? | |
| 3 | A. Well, hold on. I'm sorry, | |
| 4 | I was thinking you were talking about | |
| 5 | other. In mixed waste, absolutely, | |
| 6 | some of it can be chromic acid and, | |
| 7 | in fact, is identified as such, but | |
| 8 | it's mixed with other things. It's | |
| 9 | not just chromic acid. It's chromic | |
| 10 | acid with something else, so that's | |
| 11 | why we slid it over to the mixed | |
| 12 | waste category. | |
| 13 | Q. So when you were | |
| 14 | considering whether chromic acid | |
| 15 | records for 1971 were complete, did | |
| 16 | you also consider the mixed waste | |
| 17 | records in that analysis? | |
| 18 | A. We did not. We did not. | |
| 19 | Because I don't know that for just | |
| 20 | one example, I don't know that those | |
| 21 | mixed wastes came from the same place | |
| 22 | that the chromic acid wastes came | |
| 23 | from. Why were they mixed? Was it | |
| 24 | another process? I just don't know. | |

| Q. Let's move on to Western | |
|---------------------------------------|--|
| Electric or Agere? | |
| Is the analysis the same | |
| for Agere as it is with respect to | |
| the other plaintiffs that we talked | |
| about so far, that the information in | |
| the sections of your report dealing | |
| with the manufacturing operations and | |
| the waste generation practices are | |
| all from documents that are listed in | |
| your report under Section 6? | |
| A. With the same qualification | |
| as before, yes. | |
| Q. And can you walk me through | |
| how you performed the Agere | |
| extrapolation? | |
| A. We had a lot of | |
| information, relatively speaking for | |
| Western Electric, which is Agere, and | |
| since we don't know how to pronounce | |
| it I will say Western Electric. And | |
| we also had multiple facilities for | |
| Western Electric. | |
| So 5a, without spending a | |
| | Is the analysis the same for Agere as it is with respect to the other plaintiffs that we talked about so far, that the information in the sections of your report dealing with the manufacturing operations and the waste generation practices are all from documents that are listed in your report under Section 6? A. With the same qualification as before, yes. Q. And can you walk me through how you performed the Agere extrapolation? A. We had a lot of information, relatively speaking for Western Electric, which is Agere, and since we don't know how to pronounce it I will say Western Electric. And we also had multiple facilities for Western Electric. |

1 lot of time going through, I mean it's essentially the same process 2 3 that we went through, and this is heavily referenced. We started with 4 the Reading facility and listed the 5 waste materials that were generated. 6 Some of this is trash as 7 opposed to hazardous waste. We have 8 gallons, we have drums, some of it 9 was reported in pounds. Usually, in 10 this instance, we didn't have gallons 11 and pounds, it was one or the other, 12 so what we did was we kept a running 13 14 total of each. 15 So where we ended up, think it's probably more useful to 16 17 switch over to -- actually, we will 18 go to Roman Numeral V, which is sort of the abbreviated version of Table 19 20 5b. Actually, that's not going 21 22 to work. We will have to go to 5b, because that's where the math is. 23 Му 24 mistake.

| 1 | What we had was for | |
|----|--------------------------------------|--|
| 2 | Reading, each of the actual 12-month | |
| 3 | period from April '73 to March '74 | |
| 4 | for the different waste categories | |
| 5 | that were identified. So we had a | |
| 6 | good understanding of a particular | |
| 7 | 12-month period for each of those | |
| 8 | waste categories and we summed those | |
| 9 | up. | |
| 10 | So in the case of, let's | |
| 11 | pick one, the Miscellaneous Trash | |
| 12 | Compacted Uncompacted, I'm sorry. | |
| 13 | 45,400 for the period April '73 to | |
| 14 | March '74. If you extrapolate that | |
| 15 | times eight, I believe you will come | |
| 16 | up with the 363,525 pounds. It was | |
| 17 | that kind of a process. | |
| 18 | Q. So it's your opinion, then, | |
| 19 | that the records for the Agere | |
| 20 | Reading facility were complete with | |
| 21 | respect to the waste types that are | |
| 22 | listed on Table 5b, correct? | |
| 23 | A. We concluded that for the | |
| 24 | period April '73 to March '74 that | |
| | | |

| 1 | represented the best information we | |
|----|---------------------------------------|--|
| 2 | had about waste quantities and types | |
| 3 | for the waste produced at this | |
| 4 | facility. It was the most complete | |
| 5 | record we had. | |
| 6 | Q. And is that just because | |
| 7 | they had records for every month? | |
| 8 | A. Yes, that was a very we | |
| 9 | considered that, I considered that to | |
| 10 | be a very again, I don't want to | |
| 11 | put a qualitative judgment on whether | |
| 12 | they counted everything, but it | |
| 13 | certainly was detailed for that time | |
| 14 | frame, and it appeared that it would | |
| 15 | include most of the wastes that were | |
| 16 | generated. | |
| 17 | But, again, in an absolute | |
| 18 | sense does it include it all? I take | |
| 19 | everything at face value. | |
| 20 | Q. And going through for the | |
| 21 | North Carolina Works, can you explain | |
| 22 | how you calculated the average there | |
| 23 | and what you did to extrapolate? | |
| 24 | A. There we had two months' | |

| 1 | worth of information, February and |
|----|--------------------------------------|
| 2 | March of 1972 and copper salts and |
| 3 | pounds per month were 50,618, so we |
| 4 | took a well, actually the 50,618 |
| 5 | was the average month based on those |
| 6 | two months of information. |
| 7 | We extrapolated that up to |
| 8 | 12, so we had an annual average, and |
| 9 | then we extrapolated that for the |
| 10 | entire period of interest. |
| 11 | Q. So how did you calculate |
| 12 | the monthly average? |
| 13 | A. The monthly average was |
| 14 | 50,618 times 12, I believe. |
| 15 | Q. Well, is the monthly |
| 16 | average 50,000? |
| 17 | A. Yes, the monthly average is |
| 18 | 50,000. |
| 19 | Q. And how did you calculate |
| 20 | the 50,000? |
| 21 | A. For North Carolina we would |
| 22 | go back to 5a, and we had copper |
| 23 | salts produced in February of 1972 |
| 24 | and you've got four entries, two of |

| which are for February and two are |
|---------------------------------------|
| for March. |
| Q. So did you add them up and |
| divide by four or did you add up the |
| February ones and divide by two and |
| add up the March ones and divide by |
| two? |
| A. Let's see. I don't |
| honestly recall exactly how I did |
| that, but I can reconstruct it pretty |
| easily. |
| Q. Could you? |
| A. Yes. I believe what we did |
| was we took the two entries for 1972 |
| and averaged those, the two entries |
| for 1973 and averaged those. |
| Q. For March you mean? |
| A. For March and then came up |
| with the 50,618 as an average monthly |
| for that, yes. |
| And I will admit that |
| that's based on limited information, |
| but it was all the information we |
| were provided. And knowing what we |
| |

1 know about how that operation worked, 2 we knew there was copper salts 3 produced, and it appeared that those 4 copper salts were produced over the 5 entire period of record, so. 6 Q. And how about for 7 Allentown? 8 For Allentown it was --9 Allentown was complicated, so I have 10 to go back and look at exactly how we 11 did that. Because there aren't a lot 12 Ο. of references to months in the 13 14 Allentown records? 15 Right. The Allentown 16 records are spottier than the 17 others. And then we had this 18 category of unspecified location, 19 either Allentown or Reading. 20 going to have to look at the text and 21 see how we actually ended up doing 22 that. My recollection isn't fresh on 23 how we dealt with that. 24 What I said in the report,

| 1 | "Based on the limited quantitative |
|----|---|
| 2 | information" and this is on Page |
| 3 | 3-21 "available for Allentown |
| 4 | Works generated wastes, minimum and |
| 5 | maximum annual and eight-year |
| 6 | extrapolated totals could only be |
| 7 | estimated for the flammable liquid |
| 8 | wastes, the nonflammable solvents, |
| 9 | and acids, miscellaneous chemicals |
| 10 | waste streams. Both the minimum and |
| 11 | maximum volume for each of these |
| 12 | three waste streams was estimated due |
| 13 | to the existence of the reported |
| 14 | actual annual amounts for 1969 and |
| 15 | 1970 and Western Electric's own |
| 16 | estimates of annual volumes |
| 17 | generated." |
| 18 | So we ended up with a range |
| 19 | based on those two pieces of |
| 20 | information for each of those three |
| 21 | waste categories. And then once we |
| 22 | had those ranges for annual volumes |
| 23 | generated, those were simply |
| 24 | extrapolated times eight. |
| | i e e e e e e e e e e e e e e e e e e e |

| 1 | Q. And why is it that you |
|----|---------------------------------------|
| 2 | could only could do it for flammable |
| 3 | liquid wastes, not flammable solvents |
| 4 | and miscellaneous? |
| 5 | A. Again, this was a complex |
| 6 | one for us to do, and at this late |
| 7 | hour in the day I don't recall |
| 8 | exactly why we picked those |
| 9 | categories. I'm certain it had to do |
| 10 | with the fact that that's where we |
| 11 | had robust data sets or relatively |
| 12 | robust data sets. |
| 13 | MS. TROJECKI: Want to take |
| 14 | another break? |
| 15 | (Recess taken) |
| 16 | BY MS. TROJECKI: |
| 17 | Q. Can you turn to Page 4-1 of |
| 18 | your report. |
| 19 | A. Sure. Give me a second. |
| 20 | Q. I think there is a table |
| 21 | A. No, I was pretty certain |
| 22 | there wasn't, but I'm just being |
| 23 | thorough. |
| 24 | Q. Is the same analysis true |

for Bostik, in other words that the information that you have stated in your report in Sections 4.1.1.1 and 4.1.1.2 came from documents that you reviewed that are listed in Section 6 of your report?

- A. That is correct.
- Q. And why is it that you thought you did not have or you think you do not have enough information to determine any quantities of or -- let me rephrase that.

Why is it that you did not have enough information to extrapolate with respect to Bostik?

A. This was the one -- give me a second. I want to read.

The problem with Bostik was that we didn't trust that the Table 6a information, which comes from 1976 and 1977, represented what this particular facility could have been making in terms of product and waste material from that product.

| 1 | | Q. | When | уоu | say t | he Table 6, |
|----|-------|------------|-------|-------|--------|---------------|
| 2 | what | table | are | you | refer | ring to? |
| 3 | | A . | I'm | sorry | /, it | is getting |
| 4 | late | in th | e da | у. Т | hat's | why it |
| 5 | wasn | 't mak | ing | sense | e. 6a | had nothing |
| 6 | to d | o with | thi | s. | | |
| 7 | | | What | we h | nad we | re two or |
| 8 | three | e piec | es o | finf | format | ion regarding |
| 9 | waste | e gene | rate | d at | Bosti | k. One was |
| 10 | the (| City o | f Ph | ilade | lphia | Sewer's |
| 11 | info | rmatio | n re | gardi | ng Re | vere Chemical |
| 12 | site | ; the | othe | r was | depo | sition |
| 13 | info | rmatio | n fr | om Mr | . DeR | ewal, and |
| 14 | some | thing | call | ed th | e Busi | hman |
| 15 | memoi | randum | whi | ch sh | owed | us some |
| 16 | thing | gs abo | ut t | he co | mposi | tion of the |
| 17 | spent | acid | , bu | t did | ln't r | eally tell us |
| 18 | much | about | how | much | was | generated. |
| 19 | | | So w | ith r | egard | s to Bostik, |
| 20 | we ju | st di | dn't | have | enou | gh hard |
| 21 | factu | al in | forma | ation | in m | y view to be |
| 22 | able | to ev | en sa | ay fo | r any | given period |
| 23 | of ti | me ho | w mu | ch | it wa | as clear they |
| 24 | were | produ | cing | acid | as a | waste, but |
| Ĺ | | | | | | |

nothing that would tell us how much 1 acid was being produced for a month, 2 three months, five months, a year. 3 And I was just not 4 comfortable doing an extrapolation 5 based on the allegation-type 6 information that we had. 7 If you did have information 8 Q. that Bostik generated so much spent 9 10 acid waste in a month or a year, would you be able to extrapolate 11 throughout the period of interest? 12 It's possible we could, 13 Α. would have to look at what 14 I kind of material, hypothetically, 15 documentation we would be presented 16 with, and then we would make a 17 judgment call as to whether we could 18 do an extrapolation, if the data was 19 considered reliable for the period of 20 record and whether there -- because 21 we don't really have a lot of 22 information on the operation at 23 Bostik and how it might have changed 24

| 1 | over time, so. | |
|----|---------------------------------------|--|
| 2 | Q. Do you know whether the | |
| 3 | Bostik operation was throughout the | |
| 4 | entire period of interest as defined | |
| 5 | in your report? | |
| 6 | A. I'm not sure that I know | |
| 7 | that. | |
| 8 | Q. If you did know that, would | |
| 9 | there be any other information that | |
| 10 | you would need to determine whether | |
| 11 | or not to extrapolate, given that you | |
| 12 | had some actual quantities? | |
| 13 | A. My preference is never to | |
| 14 | extrapolate, so if we are talking in | |
| 15 | a hypothetical ideal world, I would | |
| 16 | like to have all of the waste | |
| 17 | tickets, all of the records, the | |
| 18 | invoices that show from 1969 to 1977, | |
| 19 | what waste was produced and how much. | |
| 20 | The idea would be to have | |
| 21 | all of the documented waste disposal | |
| 22 | records. Then I would be very | |
| 23 | confident in and I wouldn't have to | |
| 24 | do an extrapolation and I would know | |
| 1 | i | |

| 1 | how much waste we are talking about. | |
|----|---------------------------------------|--|
| 2 | In the instance of getting | |
| 3 | some records, yes, we could probably | |
| 4 | do something with a period of time | |
| 5 | that we're fairly confident | |
| 6 | represents all of or most of the | |
| 7 | waste that was generated for a time | |
| 8 | frame. | |
| 9 | And, then, if we knew that | |
| 10 | the facility hadn't significantly | |
| 11 | changed its operation, its waste | |
| 12 | generation practices, then I would be | |
| 13 | comfortable doing an extrapolation. | |
| 14 | Q. And many of these | |
| 15 | instances, though, is it more that | |
| 16 | you, it's not that you know that the | |
| 17 | company kept consistent operations, | |
| 18 | it's that there's no evidence to | |
| 19 | suggest that they changed; isn't that | |
| 20 | correct? | |
| 21 | A. That's correct. That's | |
| 22 | correct. | |
| 23 | Q. Okay. Let's turn to Page | |
| 24 | 4-3, Ciba-Geigy. And is it the same | |
| | 1 | |

| 1 | thing for Ciba-Geigy? |
|----|---------------------------------------|
| 2 | A. I'm sorry, is it 4.2 or |
| 3 | 4.3? |
| 4 | Q. Page 4.3. |
| 5 | A. Okay. |
| 6 | Q. So for Section 4.2.1.1 and |
| 7 | 4.2.1.2, that the information in |
| 8 | those sections are relied-upon |
| 9 | documents that are listed in Section |
| 10 | 6 of your report, and you didn't do |
| 11 | any independent analysis regarding |
| 12 | Ciba-Geigy's manufacturing operations |
| 13 | or waste generation? |
| 14 | A. Two questions there, it |
| 15 | consti I don't know how to |
| 16 | exact the second question is we |
| 17 | didn't do any independent research, |
| 18 | and the answer to the first one is |
| 19 | the same as I have answered |
| 20 | previously, we simply used the record |
| 21 | documents that we were provided. |
| 22 | Q. Okay. |
| 23 | And can you walk me through |
| 24 | the Ciba-Geigy quantification of |
| | |

| 1 | wastes? | | | |
|----|------------|----------|-------------|----------|
| 2 | A . | Sure. | Hold on one | second. |
| 3 | | All rig | ht, for Cib | a-Geigy, |
| 4 | when we we | ere look | ing at the | Cranston |
| 5 | plant, we | had wha | t we though | t were |
| 6 | fairly goo | d recor | ds from 197 | 6 and |
| 7 | 1977. | | | |
| 8 | | So on I | able 6a wha | t we did |
| 9 | was we sur | nmed up | and in most | |
| 10 | instances | they we | re tanker t | rucks. |
| 11 | Tanker tru | ıcks wer | e 3,000 gal | lons, I |
| 12 | don't reca | all exac | tly how we | knew |
| 13 | that, the | re was s | omething th | at gave |
| 14 | us the ab: | ility to | say a tank | er truck |
| 15 | was 3,000 | gallons | , and there | was one |
| 16 | or two ins | stances | where there | was |
| 17 | gallonage | and pou | nds provide | d, so we |
| 18 | were able | to do s | ome cross- | |
| 19 | referenci | ng. | | |
| 20 | | But, ar | yhow, I thi | nk the |
| 21 | summation | s that w | e did were | in |
| 22 | gallons. | So we h | ad a 1976 t | otal and |
| 23 | a 1977 to | tal, and | most of th | is, if |
| 24 | not all o | f it was | waste acid | , |

| 1 | different types of acid, but pretty | |
|----|--------------------------------------|--|
| 2 | much sulfuric acid. | |
| 3 | Q. And is it your opinion that | |
| 4 | the records for 1976 were complete? | |
| 5 | A. Again, going back to the | |
| 6 | same qualification that I made | |
| 7 | before, I don't have a way of | |
| 8 | independently ascertaining that any | |
| 9 | records are complete, but they are | |
| 10 | certainly more robust for 1976 and | |
| 11 | '77, sufficiently robust, in our | |
| 12 | view, that we could say as a minimum | |
| 13 | this was the amount of waste for | |
| 14 | these years that was generated. | |
| 15 | Q. Did you extrapolate for | |
| 16 | Ciba-Geigy? | |
| 17 | A. Yes. | |
| 18 | Q. And you extrapolated for | |
| 19 | 1976; is that correct? | |
| 20 | A. '76 and 1977. If you go to | |
| 21 | Table 6b you will see how we did | |
| 22 | that. We came up with a 1976 monthly | |
| 23 | average. Based on the 1976 totals if | |
| 24 | you take 40 let me just | |
| | | |

| 1 | Q. I think you actually |
|----------------------------------|--|
| 2 | calculated the average for each |
| 3 | month. |
| 4 | A. Yes. |
| 5 | Q. And then did that. Can you |
| 6 | verify that? I mean, that's how you |
| 7 | did it for other tables. I didn't do |
| 8 | it specifically for Ciba-Geigy. |
| 9 | A. I believe that's correct. |
| 10 | I believe you are right. |
| 11 | Q. Could you actually use the |
| 12 | calculator and just confirm that |
| 13 | that's right? |
| 14 | A. Sure. |
| | i e e e e e e e e e e e e e e e e e e e |
| 15 | Q. The first thing you tried |
| 15 16 | Q. The first thing you tried to do was, what, divide 3,400 by 6? |
| 16 17 | to do was, what, divide 3,400 by 6? A. Right. |
| 16 | to do was, what, divide 3,400 by 6? A. Right. Q. And you didn't come out |
| 16 17 | to do was, what, divide 3,400 by 6? A. Right. Q. And you didn't come out with a monthly average. So what I |
| 16 17 18 | to do was, what, divide 3,400 by 6? A. Right. Q. And you didn't come out with a monthly average. So what I think you did is for September, for |
| 16 17 18 19 | to do was, what, divide 3,400 by 6? A. Right. Q. And you didn't come out with a monthly average. So what I think you did is for September, for instance, you added up the entries |
| 16 17 18 19 20 | to do was, what, divide 3,400 by 6? A. Right. Q. And you didn't come out with a monthly average. So what I think you did is for September, for instance, you added up the entries for September and then divided by |
| 16 17 18 19 20 21 | to do was, what, divide 3,400 by 6? A. Right. Q. And you didn't come out with a monthly average. So what I think you did is for September, for instance, you added up the entries |

| 1 | A. Right. I appreciate you |
|----|---------------------------------------|
| 2 | giving me that recollection. I |
| 3 | believe that's I mean, I would |
| 4 | have to do more calculations, but I |
| 5 | believe that is how we did it. |
| 6 | So, anyhow, we came out |
| 7 | with the 1976 and 1977 monthly |
| 8 | averages that are listed in Table 6b, |
| 9 | extrapolated those out to the full |
| 10 | years, 1976 and 1977, the monthly |
| 11 | average times 12, and then we took |
| 12 | 1976 and 1977, divided it by two and |
| 13 | said that's an annual average, and |
| 14 | then took that times eight and came |
| 15 | up with 728,239 gallons. |
| 16 | Q. And what is the basis for |
| 17 | your extrapolating specifically with |
| 18 | respect to Ciba-Geigy? |
| 19 | A. A belief that we've got a |
| 20 | period of time with good waste |
| 21 | generation records, and a belief |
| 22 | that, not a belief, a lack of |
| 23 | information that would suggest that |
| 24 | operations through the period of |

| 1 | interest differed significantly from |
|------|---------------------------------------|
| 2 | 1969 to 1977. |
| 3 | Since we didn't see any |
| 4 | evidence of a change, we were |
| 5 | comfortable taking this period of |
| 6 | record and extrapolating. |
| 7 | Q. Did you see any evidence |
| 8 | that there was no change? |
| 9 | A. No. We saw no evidence of |
| 10 | a change. |
| 11 | Q. And what is Tolban that is |
| 12 | referenced in Section 4.2.1.2 of your |
| 13 | report? |
| 14 | A. According to my text, "The |
| 15 · | Cranston plant reportedly developed a |
| 16 | process to make the Ciba-Geigy |
| 17 | product known as Tolban. The Tolban |
| 18 | manufacturing process utilized |
| 19 | several intermediates including one |
| 20 | which used mixed acid for nitration. |
| 21 | The nitration process used sulfuric |
| 22 | acid and generated wastes or spent |
| 23 | sulfuric acid at the Cranston |
| 24 | facility." |

| 1 | To answer your questio | n |
|-----|-----------------------------------|-------|
| 2 | directly, what is Tolban, I would | d |
| 3 | have to go on the web and find or | u t |
| 4 | actually what that product is, wi | hich |
| 5 | I did not do. | |
| 6 | Q. Do you know if the | |
| 7 | manufacturing of that product led | d to |
| 8 | the waste that is listed in the | table |
| 9 | in your report regarding Ciba-Ge | igy? |
| 10 | A. I don't know with cert. | ainty |
| 11 | that the Tolban manufacturing pro | ocess |
| 12 | produced part or all of the acid | |
| 13 | that's discussed or presented in | |
| L 4 | Section 6a. | |
| 15 | I think it's reasonable | e to |
| L6 | expect that at least a portion of | £ |
| L7 | this waste acid came from that | |
| L8 | process, given that's what they | · |
| L9 | but it's certainly not the only - | I |
| 20 | would believe it's not the only | |
| 21 | manufacturing process that occur | red |
| 22 | at that facility. | |
| 23 | Q. If all of the records | |
| 24 | are listed in Table 6a actually 1 | refer |
| | | |

to waste generated as a result of 1 manufacturing Tolban, would you say 2 that it's not appropriate to 3 extrapolate over the eight-year 4 period given that the records 5 indicate that it was only 6 manufactured in the early to late 7 1970s? 8 Ιf Α. That would be correct. 9 we had evidence that suggested that 10 all of that waste in 6a was generated 11 from the Tolban process, then we 12 would have to modify the 13 extrapolation to only cover 14 15 period of time that that process 16 existed. I'm sorry to do this 17 Q. but I'm actually going to have 18 to ask that you go back and calculate 19 for Ciba-Geigy the monthly average, 20 because I see here in my notes that I 21 tried to do it both ways and I don't 22 know what the outcome was. Just to 23 24 be sure.

| 1 | I mean, if there's an error |
|-----|---------------------------------------|
| 2 | I want to make sure that we get it. |
| 3 | A. There is, by the way, I |
| 4 | think, in Ciba-Geigy a typo. |
| 5 | MS. WRIGHT: In the stuff |
| 6 | that we sent you yesterday. |
| 7 | THE WITNESS: Yes, if you |
| 8 | go to 4-4 of the |
| 9 | BY MS. TROJECKI: |
| 10 | Q. In the stuff that you sent |
| 11 | me yesterday? |
| 12 | A. Yes. But you will actually |
| 13 | see in the stuff I sent you yesterday |
| l 4 | the total of 66,767 pounds at the |
| 15 | top, that number is off by a little |
| L6 | bit, and that's a typographical |
| L7 | error. |
| L8 | So if you look at the |
| L9 | material that we provided yesterday, |
| 20 | you will see that that's corrected |
| 21 | and that might answer your question. |
| 22 | Q. Well, just because you |
| 23 | brought it up, I just want to say for |
| 24 | the record that the report that was |
| | |

sent to me yesterday, I received it 1 by e-mail last night at 6 o'clock. I 2 haven't had a chance to look at it 3 4 yet. In fact, I didn't get it 5 until this morning. During our lunch 6 break, I actually opened it up and 7 printed it. So we are not waiving 8 our right to object to the revised 9 report or to call Mr. Hochreiter back 10 for another day of deposition if we 11 12 have to. With that being said, I am 13 going to skim it before we leave 14 tonight during a break and I will ask 15 you whatever questions I can about 16 17 it. 18 Α. Okay, that's fine. So for right now, the 19 Q. typographical error that you are 20 speaking of in your new report, was 21 that just a typo or was that 22 different math that was performed? 23 24 MR. PETTIT: I object to

| 1 | the form of that question. It's not |
|-----|---------------------------------------|
| 2 | a new report. They are fairly minor |
| 3 | corrections to the existing report, |
| 4 | so I would object to the |
| 5 | characterization of new report. |
| 6 | MS. FLAX: And I would add |
| 7 | to that objection that Mr. Hochreiter |
| 8 | testified that the number in |
| 9 | Hochreiter 1 is incorrect, and he's |
| 10 | corrected it in the corrected pages |
| 11 | that were provided to you last |
| 12 | evening. |
| 13 | That was his testimony, so |
| L 4 | I just don't want to suggest that |
| 15 | MS. TROJECKI: And I'm just |
| L6 | trying to find out if it's just a |
| L7 | BY MS. TROJECKI: |
| L8 | Q. The question was, was it |
| L9 | just that you typed in the wrong |
| 20 | number or was there actually new |
| 21 | analysis? |
| 22 | Because I haven't read the |
| 23 | revised report, and that being said, |
| 24 | I did skim it, and I saw a lot of |
| | |

| 1 | underlined sections where it looks |
|----|---------------------------------------|
| 2 | like there were significant changes |
| 3 | to it, but, like I said, I haven't |
| 4 | read it yet. |
| 5 | A. To answer your question, it |
| 6 | was simply a transcription error. |
| 7 | Q. Okay. Now, has your |
| 8 | opinion |
| 9 | MS. TROJECKI: I want to |
| LO | have marked as the next exhibit a |
| ll | draft of your report that was sent |
| 12 | from Valerie Holliday to you on |
| 13 | September 20th by e-mail. |
| 14 | (Hochreiter Exhibit 11 was |
| 15 | marked for identification.) |
| 16 | BY MS. TROJECKI: |
| 17 | Q. And I want to call your |
| 18 | attention to Page 4-7. And the |
| 19 | paragraph that starts with "Based on |
| 20 | currently available information |
| 21 | knowledge of Ciba's operating time |
| 22 | frame and activities during that time |
| 23 | frame is insufficient to justify |
| 24 | extrapolation of the limited 1976 to |
| | 1 |

| 1 | '77 waste acid generation data into |
|----|---------------------------------------|
| 2 | the remainder of the 1969, 1977 time |
| 3 | frame." |
| 4 | That appears to be a |
| 5 | different conclusion than the |
| 6 | conclusion that you ultimately |
| 7 | reached in your final report, |
| 8 | correct? |
| 9 | A. That is correct. |
| 10 | Q. Can you tell me why the |
| 11 | change? |
| 12 | A. I don't think there was any |
| 13 | new information that was provided. |
| 14 | We took another look at all of the |
| 15 | data when this particular draft of |
| 16 | the report was produced. |
| 17 | I was looking to see if the |
| 18 | original or the initial conclusions |
| 19 | that I was reaching with regards to |
| 20 | the application of the extrapolation |
| 21 | guidance were appropriate. |
| 22 | And in the case of Ciba, I |
| 23 | made the determination that, in fact, |
| 24 | although initially I didn't feel |

1 comfortable doing the extrapolation, 2 as we looked at the data again I got myself more comfortable with it, 3 it was just a decision on my part to 4 go ahead and do the extrapolation. 5 felt comfortable with it, 6 I because to do so would be consistent 7 8 with the way we dealt with other plaintiffs or settled defendants. 9 Did you speak to defense 10 counsel at all about the change from 11 12 your first opinion that there was insufficient information to 13 14 extrapolate and then later extrapolating with respect to Ciba-15 16 Geigy? 17 I don't have a recollection Α. that I specifically talked to defense 18 counsel about that. It's possible 19 20 that it might have come up in conversation or comments, you know, 21 22 but I don't have a specific 23 recollection that defense counsel led 24 me to look at this again.

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| 1 | My recollection is that |
|-----|--------------------------------------|
| 2 | this was something that I looked at |
| 3 | in the course of developing the |
| 4 | expert report and felt that we could |
| 5 | comfortably do. |
| 6 | Q. So what was it that you |
| 7 | were missing the first time, or what |
| 8 | changed? What made you change your |
| 9 | mind, specifically? |
| 10 | A. We prepared this report, |
| l1 | basically, in 45 days, so there was |
| 12 | an awful lot of information that was |
| 13 | being digested and analyzed, and the |
| L 4 | application of these criteria, |
| 15 | because every plaintiff and settled |
| 16 | defendant had a different checkered |
| L7 | history as to exactly how much |
| 18 | information was available and how |
| 19 | much was missing. |
| 20 | So I made a first cut of |
| 21 | what I was comfortable doing the |
| 22 | extrapolation on and then had a |
| 23 | conversation with my colleague |
| 24 | Valerie, as well as, you know, |

| 1 | general discussions with counsel |
|----|---------------------------------------|
| 2 | about the direction we were going. |
| 3 | This was my decision, |
| 4 | though, and if somebody raised a |
| 5 | question, a specific question and |
| 6 | said, Gee, if you did it here, why |
| 7 | didn't you do it here, I don't have a |
| 8 | recollection of that conversation. |
| 9 | My recollection is that we |
| 10 | did an initial cut of what we could |
| 11 | extrapolate and what we couldn't and |
| 12 | then went back, as I thought was |
| 13 | prudent, to reevaluate what we had |
| 14 | done, and my sense was, you know, on |
| 15 | second read, I think we do have |
| 16 | enough information for Ciba to be |
| 17 | able to do a credible extrapolation. |
| 18 | Nothing more complicated |
| 19 | than that. |
| 20 | Q. Is this one that is sort of |
| 21 | on the fence, you could go either |
| 22 | way? |
| 23 | A. I made the decision to do |
| 24 | the extrapolation, so I'm comfortable |

| 1 | wit | th t | hat | • | | | | | | |
|----|-----|-------|------|-------|------|-----|-----|-------|-------|-----------|
| 2 | | | · | Υc | u | cou | ld | make | an. | argument |
| 3 | for | ma | n y | of | th. | ese | e x | trapo | olat: | ions |
| 4 | tha | at, | if | we | we: | re | arm | ed w | ith 1 | petter |
| 5 | inf | form | ati | on, | d. | uit | e f | rank | lγ, | we would |
| 6 | use | e th | at | inf | or | mat | ion | . A | nd i: | f we have |
| 7 | bet | ter | in | for | ma | tio | n, | then | we ' | will go |
| 8 | ahe | e a d | an d | us | e . | it. | т | his : | is a | judgment |
| 9 | cal | L1. | | | | | | | | |
| 10 | | | | Αr | nd, | o b | vio | usly | , in | a n |
| 11 | ear | lie | r i | ter | at | ion | οf | thi | s re | port my |
| 12 | fee | elin | g w | as | I | was | n't | com | fort | able |
| 13 | doi | ing | the | ех | tr | apo | lat | ion. | As | I |
| 14 | tho | ugh | t a | bou | ıt : | it, | I | felt | to | do an |
| 15 | ext | rap | ola | tic | n | o n | Cib | a wor | ıldı | nake it |
| 16 | con | nsis | ten | t w | rit! | h o | the | r de | cisi | ons we |
| 17 | wer | ce m | aki | n g | o n | ot | her | pla | inti: | ffs or |
| 18 | set | tle | d d | efe | nd | ant | s. | | | |
| 19 | | Q | • | Sc | w i | hat | sp | ecif | ical | ly was it |
| 20 | abo | out | Cib | a - G | ei | g y | tha | t mad | de y | ou decide |
| 21 | in | the | e n | d t | ha | t y | o u | coulo | i | |
| 22 | ext | rap | ola | te? | • | | | | | |
| 23 | | A | • | I | th | ink | th | e qu | anti | ty of |
| 24 | inf | orm | ati | o n | th | at | we | had, | the | fact |
| | 1 | | | | | | | | | |

1 it appeared for that 1976, '77 2 time frame to be a fairly robust data set after all. 3 4 Did you consider the 5 manufacturing operations of Ciba-6 Geigy in deciding whether or not to 7 extrapolate? 8 There was nothing in the 9 information that we had that suggested that there were significant 10 11 changes in the Ciba operation during 12 the period of time. Now, that being 13 said, the Tolban manufacturing was a 14 product that came on line during the 15 period of interest. We don't know whether there 16 17 were other manufacturing processes This plant I don't 18 that occurred. 19 think came into existence when Tolban 20 was created, they were making other 21 things. 22 And we don't know, as 23 said before, whether the Tolban 24 manufacturing process itself is

1 representative of 0 percent, 10 2 percent, 50 percent, 100 percent of 3 the waste materials that were 4 tabulated through 1976 and '77. 5 So it's certainly possible 6 for someone armed with better 7 information to be able to enlighten 8 this analysis, and I would love to 9 see if that information exists, but 10 given what we had, I was comfortable, 11 I got myself very comfortable with 12 going ahead and doing the 13 extrapolation. 14 But do you have any opinion 15 other than the possible -- other than 16 the wastes listed in your table 17 regarding Ciba-Geigy may have come 18 from Tolban manufacturing as to what 19 other manufacturing processes this 20 waste could have come from? 21 Α. I do not. Everything that 22 we know about what they did is in 23 this -- essentially summarized in 24 this report.

| 1 | Q. So you don't know anything |
|----|--------------------------------------|
| 2 | about the frequency of waste pickup, |
| 3 | correct? |
| 4 | A. I don't recall anything |
| 5 | that I saw in the documentation that |
| 6 | would give us a good indication of |
| 7 | frequency of waste pickup over the |
| 8 | period of interest. |
| 9 | Q. Okay. Can you refer to |
| 10 | Page 4-5 of your report, Knoll |
| 11 | International. |
| 12 | It appears that the only |
| 13 | information you have regarding |
| 14 | Knoll's manufacturing operations or |
| 15 | waste generation is deposition |
| 16 | testimony in this case; is that |
| 17 | correct? |
| 18 | A. That's my understanding, |
| 19 | yes. |
| 20 | Q. And why is it that you do |
| 21 | not believe you have you are not |
| 22 | able to extrapolate with respect to |
| 23 | Knoll? |
| 24 | A. If you look at Section |
| | |

| 1 | 4.3.2, and we basically summarize in |
|----|--------------------------------------|
| 2 | three bullets what we know or think |
| 3 | we know about Knoll's waste |
| 4 | generation history, and it's limited |
| 5 | to DeRewal employee deposition |
| 6 | testimony. |
| 7 | The testimony is not all |
| 8 | that enlightening or helpful. It |
| 9 | doesn't talk about definitive time |
| LO | frame. |
| L1 | The best information was |
| L2 | John Barsum basically saying that he |
| .3 | used a 4,000-gallon tanker once a |
| 4 | month for eight or nine months in |
| .5 | 1973 or '74, but this is really |
| .6 | almost anecdotal information. It is |
| -7 | not something that in the hierarchy |
| .8 | of information we felt comfortable. |
| .9 | So what we said in the |
| 20 | report is that, based on just taking |
| 21 | those three bullets at face value, |
| 22 | you can calculate a range of 39,500 |
| 23 | to 45,000 gallons of unknown liquid |
| 24 | wastes generated by Knoll during the |

| 1 | early to $mid-1970s$. | |
|----|---------------------------------------|--|
| 2 | I don't know how I could | |
| 3 | begin to credibly extrapolate that, | |
| 4 | because I'm not certain I know what | |
| 5 | time frame we are talking about, and | |
| 6 | I'm certainly not comfortable with | |
| 7 | that being a number I could rely on | |
| 8 | in terms of volume. | |
| 9 | Q. Can you turn to Page 4-6 of | |
| 10 | your report, Plymouth Tube Company. | |
| 11 | Your conclusion with | |
| 12 | respect to Plymouth Tube Company is | |
| 13 | that Plymouth Tube generated an | |
| 14 | estimated volume ranging from 28,000 | |
| 15 | to 299,000 gallons of spent acid | |
| 16 | waste, correct? | |
| 17 | A. During the period 1972 to | |
| 18 | 1976, yes. | |
| 19 | Q. And what is that based on? | |
| 20 | A. It is based on available | |
| 21 | shipping documents for waste acid | |
| 22 | produced June through November, 1976, | |
| 23 | which are the actual hard evidentiary | |
| 24 | materials, and then we had a 1971 | |
| 1 | 1 | |

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| 1 | estimate is excluded from the | |
|----|---------------------------------------|--|
| 2 | estimated range of total wastes | |
| 3 | because it is considered to be | |
| 4 | superseded by the 28,000-gallon total | |
| 5 | derived from the '76 shipping | |
| 6 | documents." | |
| 7 | So if you are allowed to | |
| 8 | make that substitution, we have three | |
| 9 | sets of numbers, and we are not able | |
| 10 | to ascribe relative merit to any of | |
| L1 | those three numbers. It's an order | |
| L2 | of magnitude differential in terms of | |
| 13 | quantity. | |
| 14 | Q. And I notice that earlier | |
| 15 | drafts of your report do not | |
| 16 | reference the 1971 permit | |
| 17 | application. Do you recall that | |
| 18 | being added at some point later? | |
| 19 | A. I think that may have just | |
| 20 | been something that was in our I | |
| 21 | don't think anybody sent it to us | |
| 22 | later. I could be wrong, but I think | |
| 23 | that we got that in the initial set | |
| 24 | of documents. | |
| | | |

| 1 | It was just something in |
|-----|---------------------------------------|
| 2 | the course of reviewing the |
| 3 | evidentiary material we said, Well, |
| 4 | you know, this is another way we |
| 5 | could look at this. |
| 6 | Q. Did you review it the first |
| 7 | time around? |
| 8 | A. We reviewed everything the |
| 9 | first time around, but you don't do |
| 10 | it perfectly the first time around. |
| 11 | You |
| 12 | Q. Was there actually a |
| 13 | decision that, after you reviewed the |
| L 4 | 1971 permit application, that it's, |
| L5 | you know, not reliable enough to base |
| L6 | an estimate on? Why was it included |
| L7 | later on, or did you just miss the |
| L8 | document completely? |
| L9 | A. No, I don't think it was |
| 20 | either. I know for a fact that I |
| 21 | knew the document existed. We made a |
| 22 | decision in the initial cut of the |
| 23 | reports or the report that the permit |
| 24 | application really wasn't relevant. |

| 1 | And then going back and | |
|----|---------------------------------------|--|
| 2 | internally reviewing what we had | |
| 3 | done, we thought of the permit | |
| 4 | application and said, Well, you know, | |
| 5 | this is a way that we might be able | |
| 6 | to bracket a range. | |
| 7 | Q. Now, does the permit | |
| 8 | application, is that just a it | |
| 9 | talks about it in your report, as | |
| 10 | proposed in the permit application, | |
| 11 | spent acids from the first still | |
| 12 | rinse were to be hauled from the | |
| 13 | facility by the contractor. Do you | |
| 14 | know if that ever actually happened? | |
| 15 | A. I do not know that. That's | |
| 16 | why we provided a range. Because if | |
| 17 | they made, which they did, the | |
| 18 | application for permit, and the | |
| 19 | permit allowed for that quantity to | |
| 20 | be generated, then conceivably that's | |
| 21 | an upper-end limit. They certainly | |
| 22 | wouldn't exceed the permit. | |
| 23 | And we certainly knew that | |
| 24 | the 28,000-gallon number was based on | |
| | | |

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| 1 | a | v | е | r | Y | | 1 : | i | m : | i ¹ | t e | d | | P | е | r | i | 0 | d | | 0 | f | | t | i | n | e | , | | a | n | d | | | | |
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| 3 | on | ı e | - | s | h | 0 | t | | d e | e a | a 1 | , | | s | 0 | | W | e | | d | i | d | n | Ť | t | | k : | n | 0 | W | | | | | | |
| 4 | wh | ı e | t | h | e | r | • | t: | h a | a ¹ | t | r | e | р | r | e | s | e | n | t | е | d | | a | | Þ | e : | r | i | 0 | d | | | | | |
| 5 | th | ı a | t | | W | a | s | | 1 0 | 7 C | Ň | р | r | 0 | d | u | C | t | i | 0 | n | | 0 | f | • | W | a : | S | t | e | , | | | | | |
| 6 | hi | . g | h | | p | r | 0 (| d · | u (| c t | tί | 0 | n | | 0 | f | | w | a | s | t | e | • | | | | | | | | | | | | | |
| 7 | | | | | | | | | i | S | > | i | n | | t | h | i. | s | | i | n | s | t | a | n | С | e | | w | е | | m | a | d∈ | à | |
| 8 | th | ı e | | j | u | d | g 1 | m. | e i | n t | t | C | a | 1 | 1 | | t | h | a | t | | W | е | | w. | i | 1 : | 1 | | g | 0 | | | | | |
| 9 | wi | . t | h | | a | | ra | a : | n (| g | ∍ . | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | ς | 2 . | • | | | 1 | A : | n d | L | У | 0 | u | | a | С | t | u | a | 1 | 1 | У | | | | | | | | | | | | |
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| 12 | ap | р | 1 | i | С | a | t: | i | 0 1 | n | £ | 0 | r | | t | h | е | | t | i | m | e | | p | e : | r | i (| 0 | d | | 1 | 7 | 2 | | | |
| 13 | to | | 1 | 7 | 6 | , | • | C · | 0 : | rı | r e | C | t | ? | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | I | Α. | • | | | ٠ | T l | n a | t | • | s | | C | 0 | r | r | e | С | t | • | | | | | | | | | | | | | |
| 15 | | | | ζ | 2 . | • | | | 1 | A ı | n d | L | w | h | a | t | 1 | s | | t | h | е | | b | a | s | i | s | | f | 0 | r | | | | |
| 16 | Уο | u | r | | е | ж | t: | r | a j | 9 0 | 1 | a | t | i | n | g | | s | p | e | C | i | f | i | C | a | 1: | 1 | У | | w | i | t: | h | | |
| L7 | re | s | p | e | С | t | | t | 0 | 1 | ? 1 | У | m | 0 | u | t: | h | | T | u : | b | е | | С | 0 1 | n | p a | a | n : | У | ? | | | | | |
| L8 | | | | Z | . | • | | | | Ι | t | h | i | n | k | • | M | r | • | | H | a | W | k | 1 | s | | | | | | | | | | |
| L9 | in | d | i | C | a | t. | i | 0 : | n | 1 | : h | a | t | | W | a | s | t | е | | W | a | s | | g (| 9 | n e | 9 | r | a | t | e | d | | | |
| 20 | fr | 0 | m | | 1 | 9 | 7 : | 2 | i | t d | > | 1 | 9 | 7 | 6 | | £ | a | C | t | 0 | r | e | d | | i. | n · | t | 0 | | t | h | a · | t | | |
| 21 | d e | c | i | s | i | 0: | n |] | p : | re | e t | t | Y | | h | e i | a | v | i | 1 : | У | | | | | | | | | | | | | | | |
| 22 | | | | ζ | 2 . | | | | (| 0 1 | c a | Y | • | | | A | n | Y | t | h | i | n | g | | e | 1 | s | е | ? | | | | | | | |
| 23 | | | | I | ١. | | | | 1 | N o | o t | | t | h | a | t | | I | | r | e | C | a | 1 | 1 | | | | | | | | | | | |
| 24 | | | | ζ | 2. | | | | (| G d | o i | n | g | | b | a | C | k | | a | g | a | i | n | | t | 0 | | t | h | е | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 1 | Plymouth Tube, do you know if |
|-----|---------------------------------------|
| 2 | Plymouth Tube was in operation before |
| 3 | 1972? |
| 4 | A. I don't know whether there |
| 5 | was an operation there prior to |
| 6 | 1972. I suspect there wasn't. |
| 7 | Q. And why do you say that? |
| 8 | A. The application for the |
| 9 | permit, I believe, was filed to allow |
| LO | for the manufacturing process to |
| 1 | commence. There may have been a |
| L2 | different operation there. I can't |
| L3 | speak to that. |
| L 4 | Q. And is that why you then |
| L5 | didn't extrapolate to earlier years? |
| 16 | A. That's correct. Basically, |
| 17 | I believe it was Mr. Hawk's, the Hugh |
| 18 | Hawk 1977 document that gave us |
| 19 | insight on the period of time they |
| 20 | operated. |
| 21 | Q. But you didn't do any |
| 22 | independent analysis to determine |
| 23 | what manufacturing processes resulted |
| 24 | in the wastes that are listed in your |
| | |

| 1 | table regarding Plymouth Tube? |
|------|---------------------------------------|
| 2 | A. No. |
| 3 | Q. Where are we up to, |
| 4 | Quickline Design & Manufacturing? |
| 5 | A. Yes. |
| 6 | Q. You believe that Quickline |
| 7 | generated a minimum volume of 1,925 |
| 8 | gallons of waste chromic acid; is |
| 9 | that correct? |
| LO | A. Let me take a look. Yes, |
| L1 | that's what I say in the report, and |
| 12 | that's my recollection. |
| L3 | Q. And that's based on a |
| L4 | DeRewal Chemical Company invoice from |
| L5 | 1973, correct? |
| L6 | A. I believe it is, yes. |
| L7 - | Q. And why is it that you were |
| L8 | not able to extrapolate with respect |
| L9 | to Quickline? |
| 20 | A. Concern here was again that |
| 21 | we had very limited information in |
| 22 | 4.5.1.2, Section 4.5.1.2. There are |
| 23 | three bullets that summarize what we |
| 24 | know about Quickline's operation. |
| | |

| 1 | One of them is deposition |
|----|---------------------------------------|
| 2 | testimony, one is correspondence from |
| 3 | DeRewal to Quickline quoting for |
| 4 | disposal of a certain type of waste. |
| 5 | And then we have the DeRewal Chemical |
| 6 | Company invoice, the one invoice |
| 7 | dating from 1973 where 35 drums of |
| 8 | chromic acid waste was taken off |
| 9 | site. We don't know the time frame |
| 10 | that that particular transport is |
| 11 | supposed to represent. |
| 12 | So we have such little |
| 13 | information that I was very |
| 14 | uncomfortable doing any |
| 15 | extrapolation. |
| 16 | Q. What do you mean when you |
| 17 | say you don't know the time frame |
| 18 | that that transport was supposed to |
| 19 | represent? |
| 20 | A. Well, dates from 1973, was |
| 21 | that a six-month aggregate, a |
| 22 | two-month aggregate, a two-year |
| 23 | aggregate, a three-year aggregate of |
| 24 | waste? We just don't know. |

| 1 | Q. I guess I didn't look at |
|----|---------------------------------------|
| 2 | that document particularly. When you |
| 3 | say dates from 1973, what does that |
| 4 | mean? |
| 5 | A. I believe that means that |
| 6 | the invoice was dated 1973. |
| 7 | Q. So based on that, would you |
| 8 | say that the chromic acid was |
| 9 | generated some time in 1973? |
| LO | A. I can't say. And that's |
| L1 | the concern. |
| L2 | Q. Haven't you done that with |
| L3 | respect to all the other plaintiffs |
| L4 | and settled defendants, though? |
| L5 | A. I made an assumption that |
| L6 | they would be in compliance with |
| L7 | RCRA, so in a best case scenario, |
| 18 | 1973, 90 days prior to the date of |
| L9 | that invoice that waste was generated |
| 20 | on site. I don't know what process, |
| 21 | I don't know anything about how it |
| 22 | came to be. |
| 23 | So even if we assume that |
| 24 | that's the underlying assumption, we |

still have one 90-day window, and we are not even certain of the 90 days, but we will assume it, in 1973 where Quickline's wastes are identified by volume. It's just insufficient in my judgment to extrapolate and draw any conclusions.

So what we say is that you can calculate 1,925 gallons, and we certainly consider that a minimum amount.

Q. Now, was Quickline in operation throughout the entire period of interest, as defined in your expert report?

A. In my report, we say during the period 1970 to 1977, Quickline Designed & Manufacturing was located at 1 Fellowship Road, and I reference Schmidt, 2003. So I don't have a recollection of Schmidt, but I am assuming that in Schmidt that is what they are telling us.

Q. So I guess what I'm

1.5

struggling with on this one is that you -- on some of the other ones said you weren't able to extrapolate because you didn't know if they were in operation at the time and for American Cyanamid and SPS you were able to extrapolate based on specifically that those companies were in operation continuously throughout the entire time period. So in this one it seems that Quickline was manufacturing the entire time period and you do have one record, so what's the difference here? The difference here is that, in the case of American Cyanamid, we've got a period within our period of interest, a subperiod of interest if you will, where we've got what we judge to be a fairly robust data set in terms of the types of wastes that were generated. In the case of Quickline,

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I've got one invoice that shows that 1 one type of waste was picked up one 2 time, and we have a quantity 3 associated with that. I don't know 4 there were ten or 50 or 100 or 5 zero other waste streams that were 6 created or produced during that 7 period of time. 8 What I know is that they 9 were operating from 1970 to '77, but 10 11 I know nothing about the waste itself, unlike Cyanamid where I have 12 quite a bit of information about 13 14 their waste. How does this compare to 15 ο. the SPS case where you had two 16 records of acetone and you knew 17 was in operation, you didn't know how 18 the acetone was generated, but you 19 2.0 did extrapolate in that case? In the case of SPS, and I 21 would have to go back and look, but I 22 believe -- SPS was one where there 23 were a number of waste streams 24

generated, of which one, a relatively minor one, was acetone.

And I believe I testified that, in the case of SPS, had acetone in these quantities been the only thing produced, we probably would not have undergone any extrapolation. We would be doing with Standard Pressed Steel exactly what we did with Quickline.

What we had, however, was more robust information for the other waste streams and since we were extrapolating those and acetone, and nickel is the other one in that category, were very small quantities to extrapolate them for an eight-year period along with the others, whether you believe that acetone and nickel can be extrapolated or not, at the end of the day, it really doesn't make any difference to the bottom line.

So you could question,

| l l | |
|-----|---------------------------------------|
| 1 | well, you know, you shouldn't have |
| 2 | extrapolated acetone and I won't put |
| 3 | up a huge fuss, but at the end of the |
| 4 | day, it doesn't make a huge |
| 5 | difference. |
| 6 | Q. So let me ask the same |
| 7 | question with respect to, say, |
| 8 | American Cyanamid's waste spill |
| 9 | bottoms. |
| LO | If you only had two |
| .1 | invoices for referencing waste spill |
| 12 | bottoms for American Cyanamid, would |
| L3 | you be able to extrapolate in that |
| L4 | instance? |
| 15 | I guess what I'm getting at |
| 16 | is, I believe that you testified |
| 17 | earlier, that with respect to the |
| 18 | American Cyanamid waste, that you |
| 19 | weren't familiar with the |
| 20 | manufacturing processes associated |
| 21 | that resulted in the generation of |
| 22 | each of the wastes in the American |
| 23 | Cyanamid records? |
| 24 | A. That's probably true for |
| | |

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| 1 | most of these sites. |
|----|---------------------------------------|
| 2 | Q. So how is it that you |
| 3 | extrapolated with respect to American |
| 4 | Cyanamid for waste spill bottoms but |
| 5 | not with respect to Quickline? |
| 6 | MS. WRIGHT: Objection. |
| 7 | You have asked this question and |
| 8 | Mr. Hochreiter has answered it on a |
| 9 | number of points. |
| 10 | MS. TROJECKI: Okay, well, |
| 11 | just let him answer it. |
| 12 | THE WITNESS: The reason |
| 13 | that we did it in some instances and |
| 14 | not in others, it was a judgment call |
| 15 | based on how the reliability of |
| 16 | the data that we were faced with, |
| 17 | whether corroborating information |
| 18 | existed, multiple sources, that sort |
| 19 | of thing. |
| 20 | There truly was no specific |
| 21 | numerical calculus that you could sit |
| 22 | down and say I mean, we did lay |
| 23 | out in my expert report the criteria |
| 24 | that I used for generally evaluating |

| 1 | whether extrapolation was possible or |
|----|---------------------------------------|
| 2 | not. |
| 3 | And at the end of the day, |
| 4 | it was a personal judgment call, |
| 5 | which I stand behind, with regards to |
| 6 | whether I was comfortable that we had |
| 7 | enough information to be able to say |
| 8 | something meaningful about what a |
| 9 | particular company was doing. |
| 10 | And in the case of |
| 11 | Quickline we have some of one |
| 12 | particular company where we have |
| 13 | probably the least amount of |
| 14 | information. |
| 15 | BY MS. TROJECKI: |
| 16 | Q. Let's move on to Rohm & |
| 17 | Haas, Page 4-9. You state that you |
| 18 | have no opinion regarding waste |
| 19 | quantities generated by Rohm & Haas |
| 20 | during the period of interest, |
| 21 | correct? |
| 22 | A. Yes. I said that the |
| 23 | information data currently available |
| 24 | at the time of this report |

| 1 | preparation was insufficient. |
|-----|--------------------------------------|
| 2 | Q. And just, I have asked this |
| 3 | question similar with respect to the |
| 4 | other |
| 5 | A. Do you mind just one |
| 6 | second. |
| 7 | (Discussion off the |
| 8 | record.) |
| 9 | BY MS. TROJECKI: |
| LO | Q. And why is it that you |
| 11 | believe you no, actually, I was |
| L2 | getting to the question of with |
| L3 | respect to the information you have |
| L 4 | in Section 4.6.1.1 and 4.6.1.2. Did |
| L5 | that all come from deposition |
| 16 | testimony? |
| L7 | A. Yes, in 4.6.1.2 we |
| L8 | reference four pieces of information |
| 19 | that in the report are identified as |
| 20 | various depositions. |
| 21 | Q. But, again, the same |
| 22 | question with respect to the other |
| 23 | plaintiffs and settled defendants, |
| 24 | you didn't do any independent |
| | |

| 1 | analysis about the manufacturing |
|----|---------------------------------------|
| 2 | processes of Rohm & Haas, correct? |
| 3 | A. We did not. |
| 4 | Q. Or their waste generation |
| 5 | handling practices, correct? |
| 6 | A. Correct. |
| 7 | MS. WRIGHT: We will |
| 8 | stipulate that Mr. Hochreiter did not |
| 9 | do any independent research. |
| 10 | MS. TROJECKI: We only have |
| 11 | two more. I already asked about the |
| 12 | other ones. Got to have it. |
| 13 | BY MS. TROJECKI: |
| 14 | Q. And why is it that you |
| 15 | believe that you don't have enough |
| 16 | information with respect to Rohm & |
| 17 | Haas? |
| 18 | A. Well, if you look at |
| 19 | Section 4.6.1.2, the deposition |
| 20 | information, if you will, Marvin |
| 21 | Jonas recalled hauling unspecified |
| 22 | waste solvents and such from the |
| 23 | Bridesburg, Pennsylvania plant, no |
| 24 | information on quantities, no |